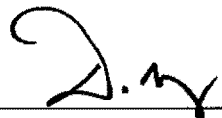


Red Hill Administrative Order on Consent, Attachment A Scope of Work Deliverable

Section: 4.2 Outline of Current Fuel Release Monitoring Systems Report

In accordance with the Red Hill Administrative Order on Consent, paragraph 9,
DOCUMENT CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to be the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fines and imprisonment for knowing violation.

Signature: _____

CAPT Dean Tufts, CEC, USN
Regional Engineer, Navy Region Hawaii

Date: 1/25/16

**OUTLINE OF
CURRENT FUEL RELEASE MONITORING SYSTEMS REPORT
15 January 2016**

SECTION 1 INTRODUCTION

1-1 BACKGROUND

Summarize the background of this Red Hill effort leading to the preparation of this report.

1-2 PURPOSE AND SCOPE

Describe the purpose of this Current Fuel Release Monitoring Procedures report, and the content that will be presented in the report based on the requirements of the Agreement of Consent.

SECTION 2 RECORDKEEPING PROCEDURES

2-1 INTRODUCTION

Provide a brief description of the content included in this section of the report.

2-2 AUTOMATED FUEL HANDLING EQUIPMENT (AFHE) AND FUEL
MANAGER DEFENSE (FMD) RECORDS

Provide content describing various documents retained from Fleet Logistics Center Pearl Harbor's AFHE and FMD systems

2-2.1 Location of records

Provide content describing location retention requirements based on record formats

2-2.1.1 Primary retention location

Describe applicable DoD policies and references

2-2.1.2 Secondary retention location

Describe applicable DoD policies and references

2-2.2 Retention periods

Describe applicable DoD policies and references

2-3 TANK TIGHTNESS REPORTS

2-3.1 Location of records

**OUTLINE OF
CURRENT FUEL RELEASE MONITORING SYSTEMS REPORT
15 January 2016**

2-3.1.1 Physical copies are retained within Fleet Logistics Center Pearl Harbor's (FLCPH) Technical library

2-3.2 Retention period

2-3.2.1 Retained indefinitely

2-4 SOIL VAPOR MONITORING RECORDS

2-4.1 Location of records

2-4.1.1 Physical copies are retained at NAVFAC-HI, DLA-Energy Pacific, and FLCPH

2-4.2 Retention period

2-4.2.1 Retained indefinitely

2-5 GROUND WATER INTERFACE TESTING RECORDS

2-5.1 Location of records

2-5.1.1 Physical copies are retained at NAVFAC-HI, DLA-Energy Pacific, and FLCPH

2-5.2 Retention period

2-5.2.1 Retained indefinitely

2-6 GROUND WATER MONITORING REPORTS

2-6.1 Location of records

2-6.1.1 Physical copies are retained at NAVFAC-HI, DLA-Energy Pacific, and FLCPH

2-6.2 Retention period

2-6.2.1 Retained indefinitely

SECTION 3 DYNAMIC RE-FILLING PROCEDURES FOR TANK RE-COMMISSIONING

3-1 INTRODUCTION

Provide a brief description of the content included in this section of the report

**OUTLINE OF
CURRENT FUEL RELEASE MONITORING SYSTEMS REPORT
15 January 2016**

- 3-2 PREVIOUS DYNAMIC RE-FILLING PROCEDURES
 FOR TANK RE-COMMISSIONING

 Provide 2014 decommissioning tank fill procedures as Appendix A
- 3-3 LESSON LEARNED FROM RED HILL TANK 5
- 3-4 CURRENT TANK RE-FILLING PROCEDURES FOR TANK RE-
 COMMISSIONING
- 3-4.1 Provide summary of NAVSUP GLS Instruction 10345.1 implementation at
 FLCPH
- 3-4.2 Provide summary of site-specific procedures
- 3-4.3 Provide NAVSUP GLS Instruction 10345.1 in Appendix B

SECTION 4 DYNAMIC FILLING PROCEDURE FOR DAILY OPERATIONS

- 4-1 INTRODUCTION

 Provide a brief description of the content included in this section of the
 report.
- 4-2 CURRENT DYNAMIC FILLING PROCEDURE FOR DAILY
 OPERATIONS
- 4-2.1 Provide summary of FLCPH's current dynamic tank filling procedures

SECTION 5 STATIC AND DYNAMIC RELEASE DETECTIONS SYSTEMS

- 5-1 INTRODUCTION

 Provide a brief description of the content included in this section of the
 report
- 5-2 STATIC RELEASE DETECTION SYSTEMS

 Provide a brief delineation between static and dynamic release detection
 systems
- 5-2.1 Automated Fuel Handling Equipment (AFHE): Inventory management
 System
- 5-2.1.1 Monitored 24/7

**OUTLINE OF
CURRENT FUEL RELEASE MONITORING SYSTEMS REPORT
15 January 2016**

- 5-2.1.2 Not a certified release detection system
- 5-2.2 Procedures implemented to compliment AFHE in order to detect leaks
- 5-2.3 Tank Tightness Testing
 - 5-2.3.1 Conducted annually
 - 5-2.3.2 In accordance with 40 CFR 280
- 5-2.4 Soil Vapor Monitoring
 - 5-2.4.1 Conducted monthly
- 5-2.5 Water Interface Testing
 - 5-2.5.1 Conducted monthly
- 5-2.6 Ground Water Monitoring Testing
 - 5-2.6.1 Conducted quarterly
- 5-3 DYNAMIC RELEASE DETECTION SYSTEMS
 - Provide a brief delineation between static and dynamic release detection systems
- 5-3.1 Research into applicable dynamic release detection systems

SECTION 6 RELEASE DETECTION SENSITIVITY

- 6-1 INTRODUCTION
 - Provide a brief description of the content included in this section of the report
- 6-2 AUTOMATED FUEL HANDLING EQUIPMENT (AFHE)
 - 6-2.1 Unscheduled Fuel Movement Alarms
 - 6-2.1.1 Tank inventory in static state
 - 6-2.1.1.1 Warning alarm actuated when 0.5 inch of movement is observed
 - 6-2.1.1.2 Critical alarm actuated when 0.75 inch of movement is observed
 - 6-2.1.2 Tank inventory in dynamic state

**OUTLINE OF
CURRENT FUEL RELEASE MONITORING SYSTEMS REPORT
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Provide definition of a dynamic state

- 6-2.1.2.1 Warning alarm actuated with one inch of movement is observed
- 6-2.1.2.2 Critical alarm actuated when 1.5 inches of movement is observed
- 6-3 TANK TIGHTNESS TESTING LEAK DETECTION RATE
- 6-3.1 0.5 gallons per hour
- 6-4 SOIL VAPOR SENSITIVITY
- 6-4.1 1 part per billion
- 6-5 WATER INTERFACE SENSITIVITY
- 6-5.1 0.01 foot
- 6-6 GROUND WATER MONITORING SENSITIVITY
- 6-6.1 Varies based on testing method
- 6-6.1.1 Ranges from 0.0040 to 25 parts per billion

**SECTION 7 PREVIOUSLY COMPLETED 2008 MARKET SURVEY OF LEAK
DETECTION SYSTEMS FOR THE RED HILL FUEL STORAGE
FACILITY, FLEET INDUSTRIAL CENTER, PEARL HARBOR, AND THE
2014 ADDENDUM 1 TO THE 2008 MARKET SURVEY**

- 7-1 INTRODUCTION
- Provide a brief description of the content included in this section of the report
- 7-2 PREVIOUSLY COMPLETED 2008 MARKET SURVEY OF LEAK
DETECTION SYSTEMS FOR THE RED HILL STORAGE FACILITY,
FLEET INDUSTRIAL CENTER, PEARL HARBOR
- 7-2.1 Will be provided in Appendix F
- 7-3 2014 ADDENDUM 1 TO THE 2008 MARKET SURVEY
- 7-3.1 Will be provided in Appendix G

**OUTLINE OF
CURRENT FUEL RELEASE MONITORING SYSTEMS REPORT
15 January 2016**

APPENDIX A - 2014 Recommissioning Tank Fill Procedure

APPENDIX B - NAVSUP GLS Instruction 10345.1

APPENDIX C - SOP Excerpt of Dynamic Filling Procedure

APPENDIX D - Current Tank Tightness testing procedure

APPENDIX E - Alarm Response Procedure

**APPENDIX F - Previously Completed 2008 Market Survey of Leak
Detection Systems for the Red Hill Storage Facility,
Fleet Industrial Center, Pearl Harbor**

APPENDIX G - 2014 Addendum 1 to the 2008 Market Survey

Additional Appendices as needed